

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of claims:

1-19. (canceled).

20. (previously presented) An isolated polynucleotide encoding an aldehyde oxidase enzyme, wherein said enzyme oxidizes an aldehyde compound to a carboxylic acid, and wherein said polynucleotide has a sequence selected from the group consisting of:

(a) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 2;

(b) the nucleotide sequence of SEQ ID NO: 1;

(c) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 4;

(d) the nucleotide sequence of SEQ ID NO: 3 and

(e) a maize nucleotide sequence of about 4.4 Kbp.

21. (previously presented) The isolated polynucleotide according to claim 20, wherein the aldehyde compound is indoleacetaldehyde and the carboxylic acid is indoleacetic acid.

22. (previously presented) A plasmid comprising a polynucleotide encoding an aldehyde oxidase enzyme, wherein said enzyme oxidizes an aldehyde compound to a carboxylic acid, and wherein said polynucleotide has a sequence selected from the group consisting of:

(a) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 2;

(b) the nucleotide sequence of SEQ ID NO: 1;

(c) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 4;

(d) the nucleotide sequence of SEQ ID NO: 3 and

(e) a maize nucleotide sequence of about 4.4 Kbp.

23. (previously presented) A transformed host cell comprising the plasmid according to claim 22.

24. (previously presented) The transformed host cell according to claim 23, wherein the host cell is a microorganism.

25. (previously presented) The transformed host cell according to claim 23, wherein the host cell is a plant cell.

26. (previously presented) A process of constructing an expression plasmid which comprises ligating in a functional manner

(1) a promoter capable of functioning in a plant cell upstream from,

(2) a polynucleotide encoding an aldehyde oxidase enzyme, wherein said enzyme oxidizes an aldehyde compound to a carboxylic acid, and wherein said polynucleotide has a sequence selected from the group consisting of:

(a) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 2;

(b) the nucleotide sequence of SEQ ID NO: 1;

(c) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 4;

(d) the nucleotide sequence of SEQ ID NO: 3 and

(e) a maize nucleotide sequence of about 4.4 Kbp, and

(3) a terminator functional in a plant downstream from the polynucleotide of (2).

27. (previously presented) An expression plasmid comprising:

(1) a promoter capable of functioning in a plant cell,

(2) a polynucleotide encoding an aldehyde oxidase enzyme, wherein said enzyme oxidizes an aldehyde compound to a carboxylic acid, and wherein said polynucleotide has a sequence selected from the group consisting of:

(a) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 2;

(b) the nucleotide sequence of SEQ ID NO: 1;

(c) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 4;

(d) the nucleotide sequence of SEQ ID NO: 3 and

(e) a maize nucleotide sequence of about 4.4 Kbp, and

(3) a terminator capable of functioning in a plant which are ligated in a functional manner and in the order described above.

28. (previously presented) A process for producing aldehyde oxidase in a transformed host cell which comprises introducing into a host cell an expression plasmid comprising:

(1) a promoter functional in a plant cell upstream from,

(2) a polynucleotide encoding an aldehyde oxidase enzyme wherein said enzyme oxidizes an aldehyde compound to a

carboxylic acid, and wherein said polynucleotide has a sequence selected from the group consisting of:

- (a) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 2;
 - (b) the nucleotide sequence of SEQ ID NO: 1;
 - (c) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 4;
 - (d) the nucleotide sequence of SEQ ID NO: 3 and
 - (e) a maize nucleotide sequence of about 4.4 Kbp, and
- (3) a terminator functional in a plant and downstream from the polynucleotide of (2), which are ligated in a functional manner to transform said host cell whereby the production of aldehyde oxidase of the transformed host cell is controlled.

29. (previously presented) The process according to claim 28, wherein the host cell is a plant cell.

30. (canceled).

31. (previously presented) An isolated polynucleotide encoding an aldehyde oxidase enzyme comprising the amino acid sequence of SEQ ID NO: 2.

32. (previously presented) An isolated polynucleotide encoding an aldehyde oxidase enzyme comprising the amino acid sequence of SEQ ID NO: 4.

33. (currently amended) ~~Am~~ An isolated polynucleotide encoding an aldehyde oxidase enzyme, wherein said polynucleotide has the nucleotide sequence of SEQ ID NO: 1 or SEQ ID NO: 3.